

Week 5: Designing and Building

LESSON 13: CONSTRUCT MOCK-UP
GRADE LEVEL: 3-5
LENGTH: 3 DAYS

TEKS/SES:

Science

Grade 3

3.1.A 3.2.A 3.2.F 3.3.A 3.3.D 3.4.B

Grade 4

4.1.A 4.2.A 4.2.F 4.3.A 4.3.D 4.4.B

Grade 5

5.1.A 5.3.D 5.4.B

Full text versions of these TEKS are available at <http://ritter.tea.state.tx.us/rules/tac/chapter112/ch112a.html>

Math

Grade 3

3.11.A 3.14.A 3.14.B

Grade 4

4.11.A 4.14.A 4.14.B

Grade 5

5.14.A 5.14.B

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Language Arts

Grade 3

3.4.B 3.15.A 3.15.B 3.29.A 3.29.B 3.30 3.31

Grade 4

4.2.A 4.2.B 4.13.A 4.13.B 4.27.A 4.27.B 4.28 4.29

Grade 5

5.2.A 5.2.B 5.13.A 5.13.B 5.27.A 5.27.B 5.27.C 5.28 5.29

Full text versions of these TEKS are available at <http://ritter.tea.state.tx.us/rules/tac/chapter110/ch110a.html>

NATIONAL STANDARDS

Science

Science as Inquiry

- Abilities necessary to do scientific inquiry
- Understanding about scientific inquiry

Physical Science

- Properties of objects and materials

Science and Technology

- Abilities of technological design
- Understanding about science and technology

History of Nature and Science

- Science as a human endeavor

Math

Geometry

- Use visualization, spatial reasoning, and geometric modeling to solve problems

Measurement

- Understand measurable attributes of objects and the units, systems, and processes of measurement
- Apply appropriate techniques, tools, and formulas to determine measurements.

Data Analysis and Probability

- Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them

Problem Solving

- Build new mathematical knowledge through problem solving
- Solve problems that arise in mathematics and in other contexts
- Apply and adapt a variety of appropriate strategies to solve problems
- Monitor and reflect on the process of mathematical problem solving

Communication

- Organize and consolidate their mathematical thinking through communication
- Communicate their mathematical thinking coherently and clearly to peers, teachers, and others

Connections

- Recognize and use connections among mathematical ideas
- Recognize and apply mathematics in contexts outside of mathematics

Representation

- Create and use representations to organize, record, and communicate mathematical ideas
- Select, apply, and translate among mathematical representations to solve problems

Language Arts

- NL-ENG.K-12.4 COMMUNICATION SKILLS Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.
- NL-ENG.K-12.7 EVALUATING DATA Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.
- NL-ENG.K-12.11 PARTICIPATING IN SOCIETY Students participate as knowledgeable, reflective, creative and critical members of society in a variety of literacy communities.

- NL-ENG.K-12.12 APPLYING LANGUAGE SKILLS Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).